

## **The Effects of Using Interactive Multimedia to Increase Students' Vocabulary at VIII Grade of SMPN 2 Jambi City in Academic Year 2019**

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### **ABSTRACT**

This research was aimed to find out the effects of using interactive multimedia at the eighth grade students of SMPN 2 Jambi City in the academic year of 2019. The subject research was class VIIIB and VIIID. The instrument used in this thesis was test. In collecting the data, the researcher used pre-test. Before conducting post-test, the researcher gave treatment. After getting enough data, the researcher calculated the data using t-test. The result of this research was found the mean score of pre-test of Experiment class is 45.02 and the mean of post-test 80.48. To see whether the hypothesis is accepted or rejected, the significance value in the table above was .306, which means that the significance value is greater than 0.05, based on decision in the statistical correlation test, there is no relationship between pre-test and post-test. Paired sample t-test is used to determine whether there are difference can be seen from the sig value (2-tailed), the value in the table above is 0.000, so it can be concluded that the results of the effects of using Interactive Multimedia to increase students' vocabulary are real significant on the pre-test and post-test data. Based on the result finding, it can be concluded that the data presented is there is an effects of using interactive multimedia towards students' vocabulary mastery.

**Keywords:** *Vocabulary , interactive multimedia , picture*

### **INTRODUCTION**

Learning English is very important now, because English is the international language of education and business, not to mention science and technology. Read on to discover other reasons why learning English is so important. However, because it is only a foreign language, there are many problems found in English learning. Student usually consider speaking and writing activities exhausting because they keep on using the same expressions and words and very soon their conversation is abruptly interrupted due to missing words. And the main reason for such communication problems is the lack of vocabulary.

Learning vocabulary in English becomes very important for the basis of learning English Talking about the importance of vocabulary; the linguist David Wilkins argued that: "without grammar little can be conveyed, without vocabulary nothing can be conveyed." Indeed, people need to use words in order to express themselves in any language. Most learners, too, acknowledge the importance of vocabulary acquisition.

In my experience as a apprentice teacher, I noticed the fact that students usually find it difficult to speak English fluently. They usually consider speaking and writing activities exhausting because

they keep on using the same expressions and words and very soon their conversation is abruptly interrupted due to missing words. And the main reason for such communication problems is the lack of vocabulary. Other students are confronted with the problem of forgetting the words immediately after the teacher has elicited their meaning or after they have looked them in the dictionary, and this also a cause of the lack of vocabulary. The more words students learn, the easier they memorize them. A person's vocabulary is defined as the set of all words that people understand or words that might be used by that person to compile new sentences.

Therefore students must have mastered the vocabulary of English language or at least have to understand the vocabulary needed. Teaching vocabulary using various instructional media will be able to help students to increase their English vocabulary. Teaching vocabulary is clearly more than just presenting new words. It also includes a decision that words should teach the basic of how frequent they are used by speaker of the language. The words most commonly used are those a teacher should teach first. But usually the way of teaching techniques makes the students lazy and bored. The teacher needs a medium for teaching English vocabulary to convey the messages or information. The media was suitable is audio visual media, because this media is trade on sense of sight. The use of media in teaching learning will help the teachers and the students engage together to get the achievements much better and also help the students to learn by themselves. Furthermore, media help the students to recognize communicative functions of the linguistic forms they use, communicate meaning in concrete situations, and use feedback to evaluate their success in conveying messages. Overall, this study highlights positive feedback from students relating to

interactive multimedia to increase students' knowledge of vocabulary and support student learning.

Technology has been heavily integrated into students' daily lives (Jones, Ramanau, Cross, & Healing, 2010). Increasingly, educational institutions provide students with digital learning resources to support face to face learning (Johnson et al., 2016). This approach, known as blended learning (Sharpe, Benfield, Roberts, & Francis, 2006), exploits learners increasing access to a broad range of technologies, such as laptop and desktop computers, tablet devices, smart phones and software applications (Chen, Seilhamer, Bennett, & Bauer, 2015; Littlejohn, Falconer, & McGill, 2008; Morris, Lambe, Ciccone, & Swinnerton, 2016). Blended learning is defined in various forms within the literature, but a useful working definition is as follows: 'an appropriate mix of face-to-face and online learning activities, using traditional instruction, guided support and independent learning, underpinned by the use of digital technologies and designed using strong pedagogical principles, to support learner engagement, flexibility and success' (Morris & Laurillard, 2015).

Last but not least, Based on the explanation above, the researcher think we have to ensure appropriate program including contents and methods also maintain the process to get satisfying outcomes. And also one of the important elements is creating good curriculum framework for school improvement because it can give clear expectation and as a guiding to achieve goal and do not forget to have and state clearly about the vision and mission.

In this research the researcher will focused on the effect of using interactive multimedia in teaching vocabulary mastery. The researcher wants to conduct a research at the eighth students of SMP N 2 Jambi City in the academic year of 2019.

## **INTERACTIVE MULTIMEDIA**

Interactive multimedia is a multimedia display designed by designers so that it looks to fulfill the function of informing messages and interactivity to 129 users (the user) Interactive multimedia is a combination of various communication channels into a coordinated communicative experience in which cross-channel language integrated interpretations do not essentially tries to emphasize the second approach of Definition 1 with more clarity and spells out the components of multimedia. Taking a systems theory perspective, it also tells us that the overall effectiveness of multimedia is better than any one component of it. But, neither of the definitions explicitly includes the “interactive” power of multimedia.

“The term ‘interactive multimedia’ is a catch-all phrase to describe the new wave of computer software that primarily deals with the provision of information. The ‘multimedia’ component is characterized by the presence of text, pictures, sound, animation and video; some or all of which are organized into some coherent program. The ‘interactive’ component refers to the process of empowering the user to control the environment usually by a computer” (Phillips, 1997).

Multimedia itself is divided into two categories, namely a) linear multimedia and b) interactive multimedia. Linear multimedia is a multimedia that is not equipped with any controller that can be operated by the user. This multimedia runs sequentially (sequentially), for example: TV and movies. Interactive multimedia is a multimedia that is equipped with a controller that can be operated by the user, so users can choose what they want for the next process.

Examples of interactive multimedia are: Game applications and interactive CDs.

## **Characteristics of Multimedia**

According to Green and Brown, 2002 Characteristics Multimedia:

### **1. Interactive Multimedia**

Users / users can fully control what and when multimedia elements will be displayed or sent. Examples: Games, interactive CDs, program applications, virtual reality, etc.

### **2. Hyperactive Multimedia**

This type of multimedia has a structure with related element elements that can be directed by the user through a link (link) with elements of the existing multimedia elements. The term Richmedia is also used to refer to Hyperactive Multimedia. Examples: world Wide Web, web site, mobile banking, online games, etc.

### **3. Linear Multimedia**

Multimedia Liner is a type of multimedia that runs straight. This type of multimedia can be seen in all types of films, video tutorials, etc. whereas Interactive Multimedia is a type of multimedia interaction, meaning that there is interaction between the media and media users through the help of computers, mice, keyboards and so on. Linear multimedia takes place without navigation control from the user. The presentation of multimedia liners must be sequential or sequential from beginning to end. Example: Movie / film, e-book, music, TV broadcast.

## **The Advantages and Disadvantages of Multimedia**

Advantages : Yan and Rongchun (2011) explain that the use of multimedia

teaching has different advantages are: First, Multi-media teaching make English class more vivid, interesting and lively, which can therefore stimulate students' interest in learning, improve class efficiency and achieve more satisfactory teaching results. With pictures, sounds and animations, multi-media teaching can provide a number of dynamic implicit information associated with linguistic factors, such as cultural background knowledge, exotic, customs and so on. In traditional class, the student is asked to listen to class mainly in order to receive information in a rather passive position. Besides, the practice designed for them are always those mechanical and repeated ones. By abandoning the above traditional methods that are not conducive to cultivate students' learning interest, multimedia teaching, a lively means could provide vivid and realistic presentation and considerably improve teaching effect.

Second, in the process of training students' listening, speaking, reading and writing abilities, multimedia teaching could create a language lively and harmonious environment, provide a good learning scenario, increase practice in four basic skills and mobilize students to participate in class activities. When taking part in these activities with concentrated, the students will have a deeper impression and remember knowledge well. If students could see, hear and express their own ideas in their words, the knowledge grasped in this process will be easier to maintain compared with traditional teaching effect.

Third, Multimedia teaching could create a practical English using environment, in which students could enhance their ability to use English. The ultimate goal of learning English for students is the future use of English language. After all, English as a language is a communicative tool. If the students only emphasize learning the language instead of using it, then the result will become the failure of English teaching.

Multimedia could associate with language and images. Through multi-sensory stimulation in learning process, the students will have access to more information.

### **The Use of Pictures in Teaching English Vocabulary**

In teaching and learning process, the role of using pictures as media has become the best choice in teaching English especially in vocabulary to the elementary students. Pictures are important to help the students in learning English vocabulary and memorizing the meanings. Ur says that visual have an important function as aids to learning simply because they attract student's attention and help encourage them to focus on the subject in hand.

According to Wright (Ur, 1948: 30)states that pictures can play a key role in motivating students contextualizing the language they are using, giving them a reference and helping to discipline the activity. According to (Wright, 1989:2) states some roles for pictures in speaking and writing.

- a. Pictures can motivate students and make him or her want to pay attention and take apart.
- b. Pictures contribute to the context in which language is being used.
- c. Pictures can be described in an objective way or interpreted or responded subjectively.
- d. Pictures can cue responses to questions or cue substitutions through controlled practice.
- e. Pictures can stimulate and provide information to be referred to in conversation, discussion, and storytelling.

From the explanation above it can be seen that Pictures are useful to focus the students' attention to imagine on what the text says. Pictures are not ambiguous; a picture should contain only what the word means. Using picture is also an effort to

help students to understand and comprehend something clearly and easily. However, teaching using pictures have an important role in the understanding. It means that using picture can be a good technique in teaching English vocabulary to the children.

### Vocabulary Mastery

In order to understand the language, vocabulary is crucial to be mastered by the learner. Vocabulary mastery is needed to express our ideas and to be able to understand other people's sayings. According to Webster (1992) mastery refers to (1) a. the authority of a master: dominion, b. the upper hand in a contest or competition; superiority, ascendancy and (2) a. possession or display or great skill or technique, b. skill or knowledge that makes one master of a subject comment. While Hornby (1995) defines mastery as complete knowledge or complete skill. From that definition, mastery means complete knowledge or great skill that makes someone a master in a certain subject.

The specificity of any individual's vocabulary knowledge depends on the person and his motivation, desires, and need for the words (Hatch and Brown, 1995). Vocabulary mastery refers to the great skill in processing words of a language. It is an individual achievement and possession (Rivers, 1989) for that reason, the biggest responsibility in increasing the knowledge is in the individual himself. The success in widening the vocabulary mastery requires their own motivation and interest on the words of a language. From the definition above, we can conclude that vocabulary mastery is an individual's great skill in using words of a language, which is acquired based on their own interests' needs and motivation. Vocabulary mastery plays an important role in the four language skills and it has to be considered

that vocabulary mastery is one of the needed components of language.

### RESEARCH METHODOLOGY

This research was called quantitative research because it uses numbers or statistics. In this research pre-experimental design with one group pre-test and post-test design would be used. Pre-test was the test which given to the students', before the treatment. The post-test was given to the student's after the treatment to find out the student's achievement. Butler (1985; 65) stated that "experimental studies are those in which the investigator deliberately manipulates some factors or circumstances in order to test the effect on some other phenomenon".

The purpose of teaching student in using pictures is to know about many vocabularies, students look for the pictures given by the teacher. Vocabulary test was based on the indicators in the theory of teaching vocabulary studied before. It has given to the students at the end of every cycle to measure the student improvement in their vocabulary mastery. I want focus teaching Students' by using interactive multimedia but only focus using pictures media to teach them.

**Table 1 Pre-test and Post-test Design of Experimental Research**

Group	Pre-test	Treatment	Post-test
Experimental Group	O <sub>1</sub>	Using Pictures Media	O <sub>2</sub>
Control Group	O <sub>1</sub>	No Treatment	O <sub>2</sub>

*Source : SMP N 2 Jambi*

The population of this study was the second year students of SMPN 2 Jambi City in Academic Year 2018/2019. The

researcher did take all populations as the sample of this study since the number was too large. In this study, the population was the students of SMPN 2 Jambi City. The researcher experiment SMPN 2 Jambi City to get information they interesting about English or not. The researcher took some students in SMPN 2Jambi City, in Academic years 2018. Which consisted of seven classes, they are 37 in each class and the total of them was 270. These classes, which were supposed, had been actively treated with either Word Grouping in increasing students' vocabulary.

The sample of this research is the eighth grade students at SMPN 2 Jambi City". They consist of 215 students. The researcher took two classes as a sample. The sample was two classes VIID and VIIB they are consist of 73 students. In this research the researcher use cluster sampling.

Technique cluster sampling is Decide the target audience and also the size of the sample. Then make on a papers the class that will be used as a sample, with a different class then take the paper randomly to take a sample.

**Table 2 Sample of the Research**

No	Class	Group	Number of The Student
1.	VIID	Experimental	37
2.	VIIB	Control	36
Total			73

*Source : SMPN 2 jambi City*

The test would give through pre-test and post-test. First the researcher would giving pre-test to my students' and the researcher would give them 25 question. This test to check their understanding about vocabulary. To post-test the researcher would give them 25 questions to know that they increase their vocabulary or not. The test that the researcher gives was a multiple choice

## FINDINGS

The result of the pre-test showed that the students' vocabulary was low, most of students got fair and poor scores, this result was in accordance with the teacher's statement that the students' daily marks in vocabulary were the lowest among other skills taught in the English subject. The result of pre-test are as follows:

The table above showed the pre test score of experimental class VIID students at SMP N 2Jambi in Monday, February 4<sup>th</sup> 2019. In the table above, it can be saw that of the 37 students who took the pre-test conducted before treatment in the Experiment class, there was 4 students got good score, 11 students got fair score, 10 students got poor score and 12 students got very poor score. There was 4 students who obtained high category scores or a total of 10,8%, which means that the low category number was much greater, namely 90,2% of 100%.

Based on data on the table above, after given the tratment in experimental class using interactive multimedia showed that of the 37 students who took the post-test conducted after treatment in the Experiment class, there was 12 students got excellent score, 22 students got very good score, 3 students got very poor score. There was 34 students who obtained high category scores or a total of 91,8%, which means that the low category number was much greater, namely 8,2% of 100%.

The result of the pre-test of Control Class showed that the students' vocabulary was low, most of students got good and fair scores, this result was in accordance with the teacher's statement that the students' daily marks in vocabulary were the lowest among other skills taught in the English subject.

## DISCUSSIONS

To determine whether of teaching English vocabulary by using Interactive

Multimedia that aims to improve their vocabulary at class VIII SMPN 2 Jambi City in academic year 2018/2019. The researcher conducted the study for approximately one month. The first, the researcher provided treatment in the experiment class. While in the control class is not given treatment by using Interactive Multimedia. In this study, researchers chose two classes as an ingredient in the study. There are classes VIII B as control class VIII D as experimental class. Each of which amounted to 37 student and 36 students. The researcher used three component of vocabulary in test. There are adjective, verb and noun.

The researcher provided post-test in the control class after previously held the pre-test. But here, the researcher did not perform the treatment in advance. In experiment class, students' were given the treatment in advance. Students learn to use picture media as a treatment. Then the researcher gave post-test to student. In order to get the data that vocabulary mastery by using interactive multimedia is improve in comparison with that do not use interactive multimedia.

There is connection of using interactive multimedia with student to improve student vocabulary mastery. According to Yan and Rongchun (2011) explain that the use of multimedia teaching has different advantages are: First, Multimedia teaching make English class more vivid, interesting and lively, which can therefore stimulate students' interest in learning, improve class efficiency and achieve more satisfactory teaching results.

Based on the computation, the mean score of pre-test of Experiment class is 45.02 and the mean of post-test 80.48. To see whether the hypothesis is accepted or rejected, The significance value in the table above was .306, which means that the significance value is greater than 0.05,

based on decision in the statistical correlation test, there is no relationship between pre-test and post-test. Paired sample t-test is used to determine whether there are difference can be seen from the sig value.(2-tailed), the value in the table above is 0.000, so it can be concluded that the results of the effects of using Interactive Multimedia to increase students' vocabulary are real significant on the pre-test and post-test data. So, it can be stated that the hypothesis "The Effects of Using Interactive Multimedia to Increase Students' Vocabulary at the Eighth Grade Students of SMPN Jambi City in the Academic Year of 2019 is accepted".

## **CONCLUSIONS AND SUGGESTIONS**

Based on the research finding and discussion, it can be concluded that using Interactive Multimedia can improve their vocabulary mastery. It can be seen there was a significant difference student's vocabulary score between the class eighth students' of SMPN 2 Jambi city who are using pictures media as a media of teaching.

Based on the research conducted on seventh grade at SMPN 2 Jambi in academic year 2018/2019, it could be concluded that there was effect of using interactive multimedia in teaching vocabulary (noun and adjective). It was proved by the students' average or mean of post-test score in the experimental class was higher after given the treatment than the controlled class. The average of post-test score in experimental class was 80,48 and in controlled class was 50,44.

Based on the finding discussion, teaching vocabulary by media using interactive multimedia can improve students' vocabulary mastery. By using this media can make the process in learning vocabulary will be fun and did not make student fell bored. Than the students

can add and improve about their vocabulary after they are learning by using pictures media.

English teachers should be more creative in teaching and learning process in order to increase students' motivation in learning English. Teachers could use various teaching techniques and teaching media, flashcards for instance, which are interesting, enjoyable and meaningful by considering various aspects such as size of class, time allocation, students' character and etc. Students should be more active or have high motivation in teaching and learning process because they have important roles in achieving their success in learning.

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